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Dr. Joshua Lederberg President The Rockefeller University 1230 York Avenue New York, NY 10021

Dear Josh:

As always it is both pleasing and thought provoking to hear from you.

The passage you noted in my article on decapitation was meant to convey a Soviet perspective that I would not endorse but nonetheless would take seriously. I meant to point out there that the perceived meaning and strategic effect of command system improvements does depend upon the context of policy in which they are undertaken. In and of themselves, measures to protect the command system are certainly desirable, indeed compelling from the U.S. point of view, and do project the commitment to protected retaliation that is the central principle of stable deterrence. When combined with increases in offensive capacity, however, that can be effectively used for preemptive attack (i.e. the hard target capabilities of the MX, the D-5, and the Pershing II) and with doctrinal discussions of the necessity to prepare for an enduring nuclear war, measures to provide highly robust and extended command system protection do suggest an anticipation of war and a method for fighting it that the Soviets are destined to find particularly dangerous.

Your analogy to SDI and to the general problem of imperfect fixes does go to the heart of the matter. It is in fact extremely difficult to make a command system withstand a very deliberate attack primarily because its central authorities, few in number and normally well identified, are inherently vulnerable. Soviet officials are quite sensitive to that fact. Their system appears to be more dependent on central authority; its internal controls are more rigidly and more thoroughly imposed; its susceptibility to paralysis if central authority is removed is commensurately greater. Though the U.S. would normally be extremely reluctant to count on such a thing, Soviet officials with knowledge of the actual arrangements probably do fear it. Knowing therefore that absolute protection is not feasible against fully dedicated attack and observing the simultaneous programming of U.S. offensive capability, they appear to be concerned about a U.S. preemptive strategy that might succeed: a surprise attack on the Soviet command system that denies Soviet forces the authority to

operate with subsequent and presumably rather extended mop-up operations against Soviet forces that have been paralyzed by the collapse of central authority. They might consider Soviet retaliation under these circumstances to be random and of small scale—something that a protected (and actively defended) U.S. system might survive reasonably well.

Granted, then, for the sake of argument, that the Soviets have coherent reason to worry, does that not enhance deterrence and is that not desirable? It certainly would, if the relationship between threat and deterrence were a monotonically increasing function. In fact that relationship almost certainly passes through an optimum and hence one has to ask where matters stand with respect to the optimum threat before deciding whether either an increase or a decrease is desirable. That is not an easy assessment to make, but particularly at the time I wrote the article I did think the degree of threat was beginning to be excessive. Preventing war by means of deterrence requires that the threat to retaliate for any attack be balanced by reassurance that there is no intention to initiate war.

I will concede that the concerns I expressed were inspired by the projected surge in U.S. offensive capability and the denigration of restraining diplomacy rather than by the measures taken to improve command system protection. As Blair's work suggests, the current U.S. system has serious weaknesses that absolutely need to be strengthened. The measures taken to increase what is generally called survivability (i.e. the ability to function under attack for several hours up to several days) clearly will strengthen deterrence rather than weaken it. The idea of providing a command system that could sustain nuclear war for 60 days is much more of a question. We have espoused that objective. I do think we need to think more carefully about it. Because of the context and the Soviet reaction it could be self-defeating.

I am eager to discuss BW issues when there is a chance. Mercifully they pose no immediate deadlines and hence it is easy to put them aside for a while. We all know the long-term dangers of that, however.

Thanks as always for your thoughts.

Very best regards,

John Steinbruner